

2SB0928, 2SB0928A (2SB928, 2SB928A)

Silicon PNP epitaxial planar type

For power amplification

For TV vertical deflection output

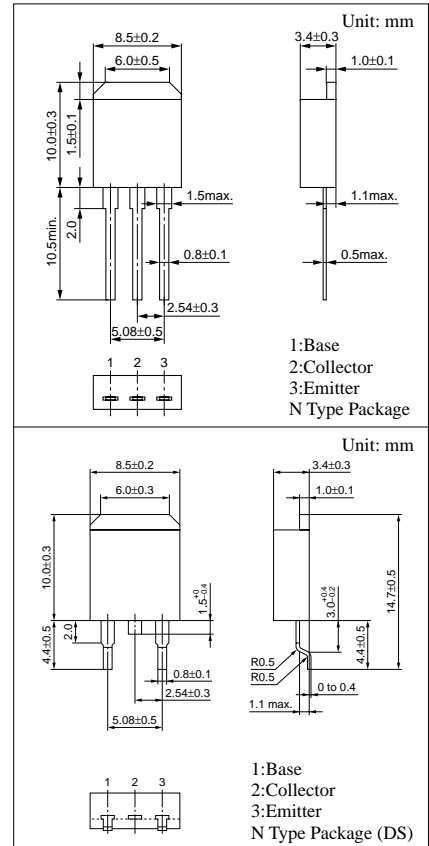
Complementary to 2SD1250 and 2SD1250A

Features

- High collector to emitter V_{CE0}
- High collector power dissipation P_C
- N type package enabling direct soldering of the radiating fin to the printed circuit board, etc. of small electronic equipment.

Absolute Maximum Ratings ($T_C=25^\circ\text{C}$)

Parameter	Symbol	Rated	Unit
Collector to base voltage	V_{CBO}	-200	V
Collector to emitter voltage	V_{CEO}	-150	V
		-180	
Emitter to base voltage	V_{EBO}	-6	V
Peak collector current	I_{CP}	-3	A
Collector current	I_C	-2	A
Collector power dissipation	P_C	$T_C=25^\circ\text{C}$	30
		$T_a=25^\circ\text{C}$	1.3
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



Electrical Characteristics ($T_C=25^\circ\text{C}$)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -200\text{V}, I_E = 0$			-50	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-50	μA
Collector to base voltage	V_{CBO}	$I_C = -500\mu\text{A}, I_E = 0$	-200			V
Collector to emitter voltage	V_{CEO}	$I_C = -5\text{mA}, I_B = 0$	-150			V
			-180			
Emitter to base voltage	V_{EBO}	$I_E = -500\mu\text{A}, I_C = 0$	-6			V
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = -10\text{V}, I_C = -150\text{mA}$	60		240	
	h_{FE2}	$V_{CE} = -10\text{V}, I_C = -400\text{mA}$	50			
Base to emitter voltage	V_{BE}	$V_{CE} = -10\text{V}, I_C = -400\text{mA}$			-1	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -0.5\text{A}, f = 10\text{MHz}$		30		MHz

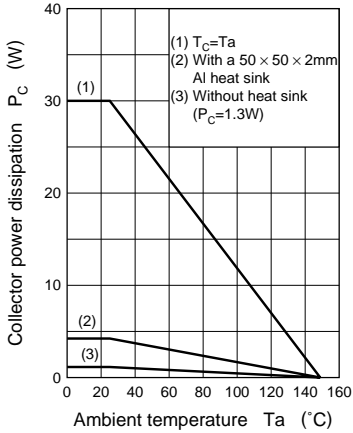
* h_{FE1} Rank classification

Rank	Q	P
h_{FE1}	60 to 140	100 to 240

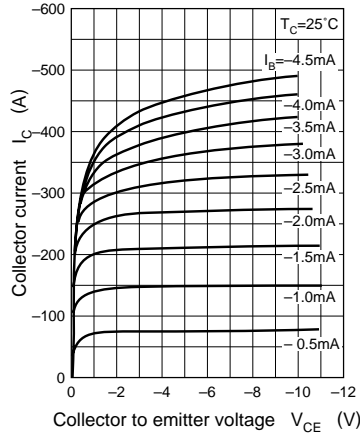
Note) The part numbers in the parenthesis show conventional part number.

Note: Ordering can be made by the common rank (PQ rank $h_{FE1} = 60$ to 240) in the rank classification.

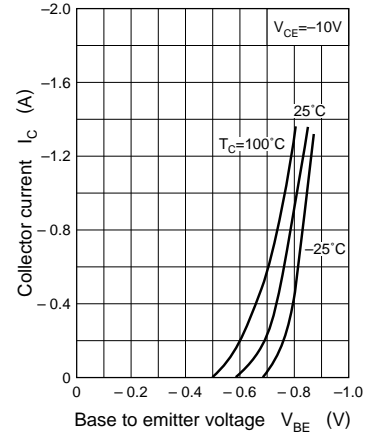
$P_C - T_a$



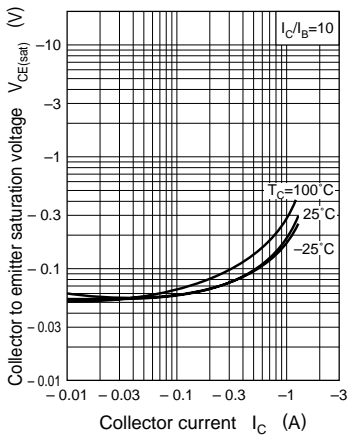
$I_C - V_{CE}$



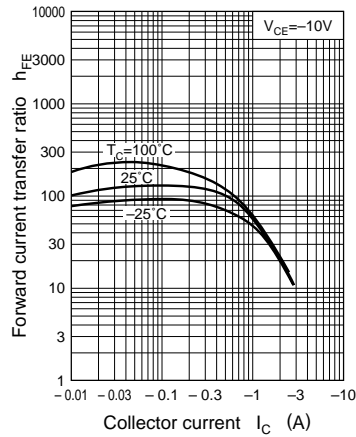
$I_C - V_{BE}$



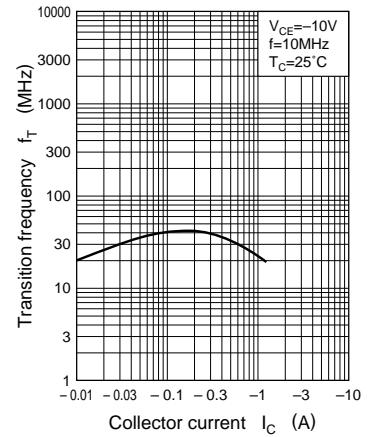
$V_{CE(sat)} - I_C$



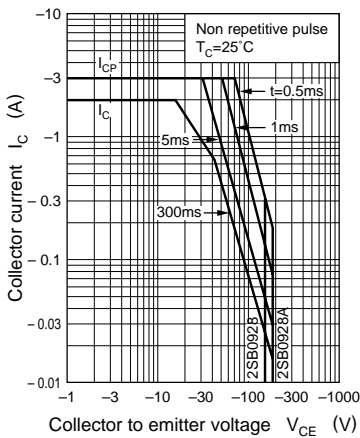
$h_{FE} - I_C$



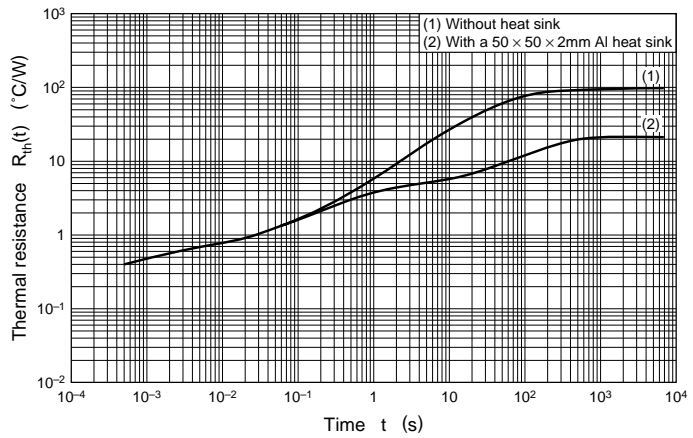
$f_T - I_C$



Area of safe operation (ASO)



$R_{th(t)} - t$



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